CLAIMS

I Claim:

1. A method of performing a soft handoff comprising the steps of:

receiving a request for a change in power from a communications device at a plurality of base stations;

sending the request from at least one of the base stations to a central processing station;

determining at the central processing station a power adjustment ratio for each of the plurality of base stations; and

sending at least one control signal from the central processing station to each of the plurality of base stations to adjust the power output of at least one of the plurality of base stations.

2. A method of claim 1 further comprising the steps of:

utilizing an algorithm to determine the power adjustment ratio at the plurality of base stations.

3. The method of claim 2 wherein the algorithm is at least partially defined by:

$p1a = p2a = (p1b + p2b)/2$;

wherein $p1b$ and $p2b$ are power levels before a handoff transition;

wherein $p1a$ and $p2a$ are power levels after a handoff transition.

4. The method of claim 1 wherein the step of sending at least one control signal from the central processing station to each of the plurality of base stations is performed during a soft handoff.

5. The method of claim 1 wherein the communications device is a cellular telephone.

6. The method of claim 1 wherein the communications device is a personal digital assistant.

7. The method of claim 1 wherein the communications device is a laptop computer.

8. The method of claim 1 wherein the central processing station is configured to send a power control signal.

9. A communication system for controlling power during a soft handoff comprising:

a plurality of base stations configured to send and receive signals to a plurality of communication devices; and

a central command station configured to send and receive signals to the plurality of base stations, the central command station further configured to communicate power control commands to the plurality of base stations;

wherein the power control commands control output power of at least two of the plurality of base stations in response to one of the communication devices sending a power adjust request.

10. The communication system of claim 10 wherein the power control commands are sent to at least two of the base stations during a soft handoff.

11. The communication system of claim 10 wherein the central command station utilizes an algorithm to determine an adjustment of power at the at least two base stations.

12. The communication system according to claim 11 wherein the algorithm is defined at least in part by:

$p1a = p2a = (p1b + p2b)/2;$

wherein p1b and p2b are power levels before a handoff transition;

wherein p1a and p2a are power levels after a handoff transition.

13. The communication system of claim 10 wherein the communications device is a cellular telephone.

14. The communication system of claim 10 wherein the communications device is a personal digital assistant.

15. The method of claim 10 wherein the communications device is a laptop computer.

16. The communication system of claim 10 wherein the communication system is a CDMA system.

17. A central command station comprising:

a first communication channel for sending and receiving data from a first base station;

a second communication channel for sending and receiving data from a second base station;

one or more processing units for determining power control signals for controlling the output power of the first base station and the second base station, wherein the power control signal is determined in response to a request from a communication device, the request being received by both the first base station and the second base station.

18. The communication system according to claim 17 wherein the central command station comprises a processor configured to determine a power control ratio for each of the first base station and the second base station.

19. The communication system according to claim 18 wherein the power control ratio is determined using an algorithm.

20. The communication system according to claim 17 wherein the algorithm is defined by:

p1a = p2a = (p1b + p2b)/2;

wherein p1b and p2b are power levels before a handoff transition;

wherein p1a and p2a are power levels after a handoff transition.

21. A system for performing a soft handoff comprising:

means for receiving a request for a change in power from a communication device at a plurality of base stations;

means for sending the request from at least one of the base stations to a central processing station;

means for determining at the central processing station a power adjustment ratio for each of the plurality of base stations; and

means for sending one or more control signals from the central processing station to each of the plurality of base stations to adjust the power output of at least one of the plurality of base stations.

22. The system according to claim 21 further comprising:

means for utilizing an algorithm to determine the adjustment of power output at the plurality of base stations.

23. The system according to claim 22 wherein the algorithm is defined by:

$p1a = p2a = (p1b + p2b)/2;$

wherein p1b and p2b are power levels before a handoff transition;

wherein p1a and p2a are power levels after a handoff transition.